PIPADOR REVISION

MRCOG Part 1 Revision Notes

Complete Mole

PATHOLOGY • LECTURE 324

VISUAL EXAMINATION REVISION NOTES

2026 Edition

MRCOG PART 1 REVISION NOTES | PATHOLOGY

324 Complete Mole

Genetics, pathology, clinical features and management of complete hydatidiform mole

46,XX	p57 −	≈ 15%	≈ 1 in 600
Androgenetic (no maternal DNA)	Diagnostic immunostain	Risk of GTN	Pregnancies — any mole (UK, approx.)

■ KEY FACTS: Learning objectives

- Describe the genetics, pathology and clinical features of complete hydatidiform mole.
- Describe complications related to very high hCG.
- Describe evacuation, registration, hCG surveillance and contraception (UK GTD service).

324.1 Genetics and pathology

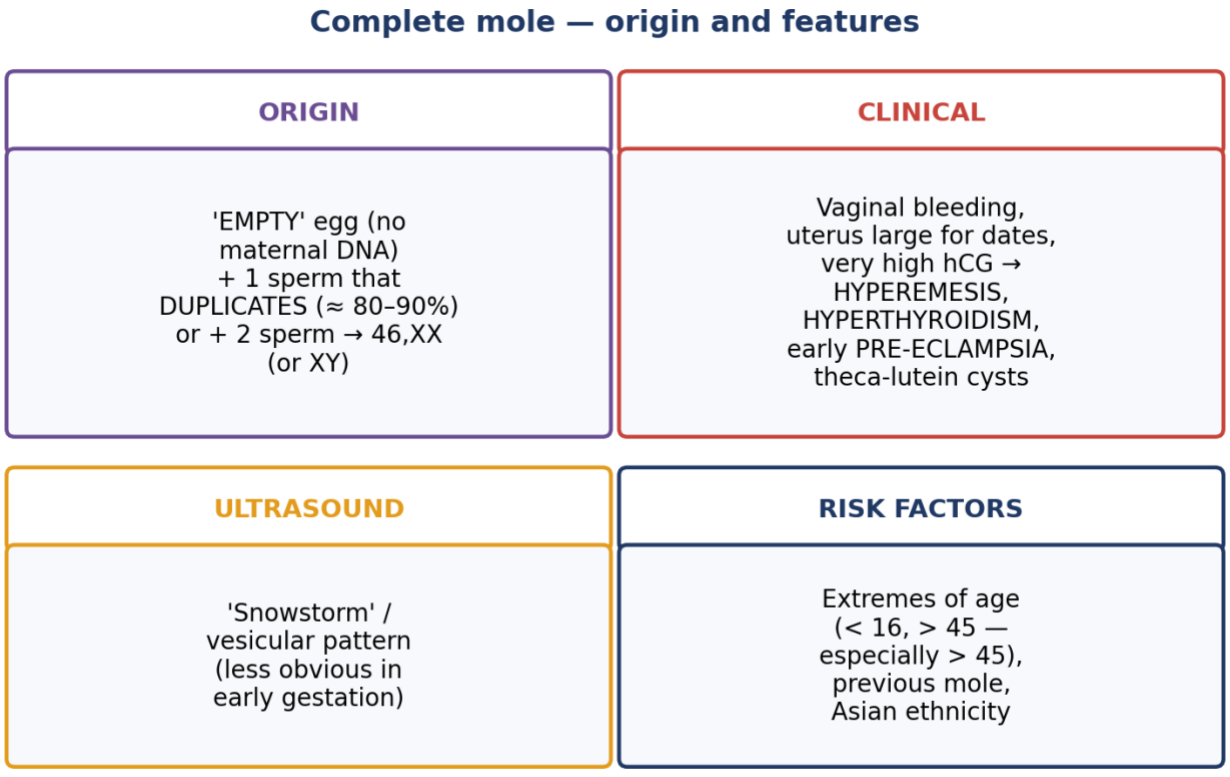


Figure 324.1 — Complete mole

- Histology: **diffuse villous oedema** with central cisterns, **circumferential trophoblast hyperplasia** with atypia, **no fetal tissue**
  - In early ('very early') moles, changes are subtle — p57 negative is key.
- **Familial recurrent moles** (NLRP7, KHDC3L mutations): biparental complete moles — refer for genetic counselling; donor eggs may be needed.
- **Twin pregnancy** with a complete mole and a normal co-twin: continuation possible with counselling (↑ pre-eclampsia, bleeding, GTN).

324.2 Clinical features

hCG-related complication	Mechanism
Hyperemesis gravidarum	Very high hCG
Hyperthyroidism	hCG stimulates TSH receptor (thyroid storm at evacuation — β-blockers)
Early pre-eclampsia (< 20 weeks)	Abnormal placentation
Theca-lutein cysts	hCG ovarian stimulation — regress after evacuation (torsion risk)
Respiratory distress at evacuation	Trophoblast embolisation, fluid overload, thyroid storm

324.3 Management

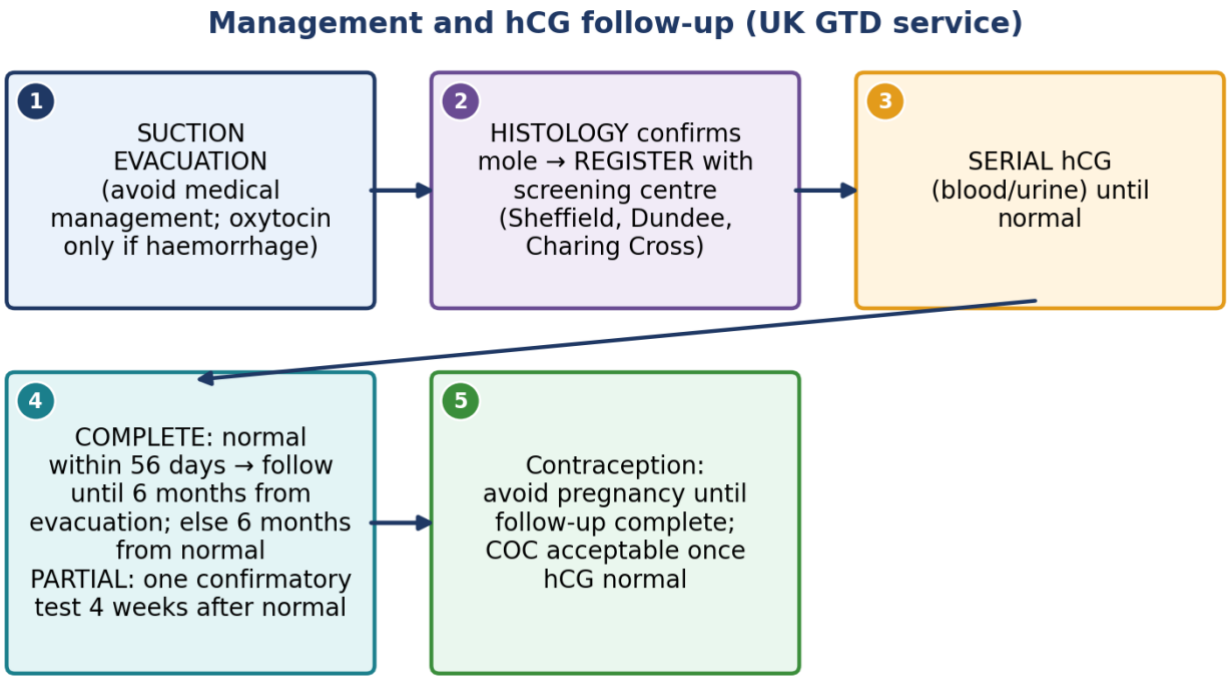


Figure 324.2 — Management and follow-up

- **Suction evacuation** is preferred
  - Avoid prostaglandins/oxytocin before evacuation where possible (trophoblast embolisation) — oxytocin only for haemorrhage after evacuation.
- **Anti-D** prophylaxis for RhD-negative women after evacuation of a molar pregnancy (RCOG GTG 38).
- Avoid pregnancy until follow-up is complete
  - Hormonal contraception including COC acceptable once hCG normal (IUD after hCG normal — perforation risk).
- Chemotherapy if criteria met (Lecture 325) — overall cure ≈ 100% for low-risk disease.

324.4 Must-know summary

■ EXAM TIP

- Empty egg + sperm → 46,XX androgenetic; no fetal tissue; diffuse oedema, circumferential trophoblast hyperplasia; **p57 negative**.
- Very high hCG → hyperemesis, hyperthyroidism, early pre-eclampsia, theca-lutein cysts.
- Suction evacuation, registration, serial hCG; GTN ≈ 15%.
- Familial recurrent moles: NLRP7.

■ MNEMONIC / MEMORY AID

'Complete = Copied dad, no baby, no p57'.